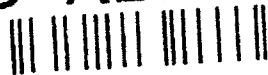


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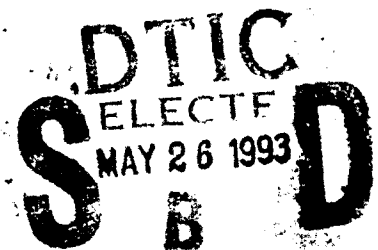
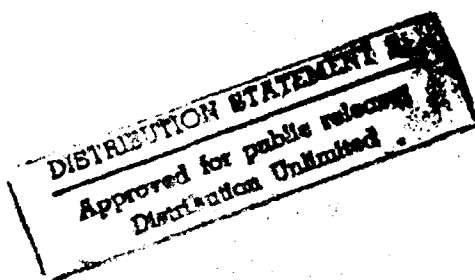


DLA-93-P20342

FREIGHT COST COMPARISON BETWEEN QUICKTRANS AND THE GUARANTEED TRAFFIC PROGRAM

January 1993

OPERATIONS RESEARCH AND ECONOMIC ANALYSIS OFFICE



DEPARTMENT OF DEFENSE
DEFENSE LOGISTICS AGENCY

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January 1993

Mark Kleinhenz

**DEPARTMENT OF DEFENSE
DEFENSE LOGISTICS AGENCY
OPERATIONS RESEARCH AND ECONOMIC ANALYSIS OFFICE
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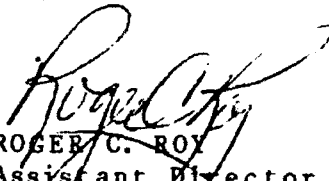


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FOREWORD

The Freight Cost Comparison Between QUICKTRANS and the Guaranteed Traffic Program is an analysis to support the determination of a low cost program for moving shipments from the defense depots to customers. The work compares shipping freight from the Travis Air Force Base area through either QUICKTRANS or Guaranteed Traffic for a period of three months. Guaranteed Traffic was found to provide an equivalent level of service for less expense than QUICKTRANS.

We would like to thank the Naval Material Management Transportation Office for providing historical data on QUICKTRANS and for their comments and suggestions which were very helpful in conducting this study. Also, we are indebted to the Transportation Management Division, Traffic Management Branch, Defense Depot Tracy/Sharpe, for providing rate data, technical knowledge and expert opinion on the operation of the air Guaranteed Traffic program.


ROGER C. ROY
Assistant Director
Policy and Plans

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EXECUTIVE SUMMARY

In March 1992, the Defense Logistics Agency (DLA) was directed by the Assistant Secretary of Defense for Production and Logistics to assume management of all defense depots. In May 1992, representatives from DLA, Naval Supply Systems Command, and the Naval Material Management Transportation Office (NAVMTO) met in Norfolk, VA to discuss the most cost effective means of moving cargo from the depots to customers. One of the principal issues became the cost effectiveness of the QUICKTRANS (QT) program as compared to the cost effectiveness of the Guaranteed Traffic Program (GT). QUICKTRANS was begun by the Navy in the 1950s as a means of reliably moving high priority cargo to customers. GT was developed by DLA in the early 1980s to take advantage of the deregulation of the trucking industry and the agency's leverage as a volume shipper.

The purpose of this study was to determine which system, QT or GT, provides the least overall transportation cost to the Department of Defense.

The scope of the study includes all high priority air shipments originating at the QT service point of Travis AFB for a 3-month period. Data for the analysis was provided by NAVMTO from their monthly billing tapes.

The cost calculation for GT included both transportation cost and Government Bill of Lading (GBL) preparation cost. The cost calculation for QT included surface transportation cost inbound to the QT origin service point (Travis AFB) and the transportation cost from there to QUICKTRANS customers.

Results of the cost calculations and sensitivity analyses indicated that GT was more cost effective than QT. GT is estimated to produce a savings over QT in the range of \$135,000 to \$287,000 quarterly for high priority air shipments originating at Travis AFB. An additional sensitivity analysis examined the effect on results of increasing the utilization of QT flights by having DLA air shipments ride 'free' under the assumption that sufficient capacity for additional freight was available. Under this scenario the cost of QT increased by only \$3,000 while the cost of GT increased by \$20,000. However, inspite of the greater cost to the CT program, GT remained more cost effective than QT.

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SECTION 1

INTRODUCTION

The Defense Logistics Agency's (DLA) Operations Research Office was tasked by the DLA Directorate of Supply Operations, Transportation Division (DLA-OT), to compare the Navy QUICKTRANS charges from Travis AFB to the charges derived from the rates contained in the Guaranteed Traffic (GT) agreements.

1.1 BACKGROUND

QUICKTRANS was started by the Navy in the mid-1950s to handle high priority cargo going to Navy customers. Using QUICKTRANS assured both the shipper and receiver that cargo would be picked up and delivered on a set schedule under strict transit time requirements. QUICKTRANS was unique in that it was a Government controlled system, operating as a freight forwarder, utilizing commercial carriers under contract to the Navy. This simply meant that freight would move from origin to destination under QUICKTRANS documentation but could physically be interchanged across several contractors in its movement from origin to final destination.

Over the years QUICKTRANS has evolved into a network of several systems operating together as a single entity designed to support all elements in the Department of Defense (DoD) and other U.S. Government agencies. Current elements of the QUICKTRANS system include: QUICKTRANS, Consolidated Truck (CONTRUCK), the Northeast Dedicated Truck System (NDTS), and the Navy Expediting and Consolidation Program (NECP).

QUICKTRANS is a contract airlift and commercial truck operation designed to move cargo that is high priority, outsized, or requires special handling. QUICKTRANS provides service between points on a single coast and cross-country between points on either coast. Routes are run on a strict schedule and service is provided from the origin QUICKTRANS terminal to specific points named in the routing guide. The shipper is responsible for delivering the cargo to the appropriate QUICKTRANS air or truck terminal/service point for onward movement unless the shipper is colocated at a QUICKTRANS service point. Cargo is generally allowed to "free flow" into the QUICKTRANS system. However, materiel which requires special handling, e.g., exceptionally hazardous material, security cargo, cargo requiring movement on a particular flight, cargo of exceptional size, or cargo to off-line points, must be cleared in advance of the movement and will incur additional costs. The average QUICKTRANS, system-wide transit time for high priority shipments is 55 hours.

CONTRUCK is a truck-based operation that augments the QUICKTRANS airlift system. Its primary purpose is to transport routine, low priority less-than-truckload (LTL) shipments between the east and west coasts, and between Norfolk, VA with the NDTS to provide

service to points in the Northeastern states. In addition, CONTRUCK interlines with QUICKTRANS at designated points for delivery of high priority cargo moving through the QUICKTRANS system. Routes are run on a strict schedule and service is provided from the origin CONTRUCK terminal to specific points named in the routing guide. The shipper is responsible for delivering the cargo to the appropriate CONTRUCK terminal/service point for onward movement. Cargo is generally allowed to "free flow" into the CONTRUCK system. However, shipments weighing over 10,000 pounds, oversized shipments, or shipments moving to off-line points, must be cleared in advance of the movement and will incur additional costs. The average CONTRUCK, system-wide, transit time for routine cargo is five and one half days.

NDTS is a system of dedicated, multi-routed trucks that provide transportation service in support of ship and shore activities located in the Northeastern U.S. A single motor carrier provides pickup, delivery, and linehaul service to and from these activities. NDTS interlines with QUICKTRANS and CONTRUCK at Norfolk, VA to provide origination and termination service. Cargo is generally allowed to "free flow" into the NDTS system. However, shipments weighing over 10,000 pounds, oversized shipments, or shipments moving to off-line points, must be cleared in advance of the movement and will incur additional costs. The average NDTS, system-wide, transit time is approximately 53 hours.

NECP is a Navy managed, contractor operated freight forwarding system. Contractor operations are located in Norfolk, VA for cargo originating on the east coast and Travis AFB, CA for cargo originating on the west coast. NECP provides three basic services: the first is to expedite shipments from domestic vendors to ships and Naval activities overseas, the second is to consolidate high priority shipments moving from all Continental United States (CONUS) Navy, DLA, General Services Administration (GSA), and commercial shippers to overseas destinations via the Military Airlift Command (MAC), and finally to stuff seavans destined for ocean carriage from the west coast. Vendor cargo is directed into NECP by notation on the respective purchase order, contract, or Blanket Purchase Order (BPO).

Shipments moving in the QUICKTRANS system (includes QUICKTRANS, CONTRUCK, NDTS, AND NECP) are routed by Unit Identification Code/Department of Defense Activity Address Code (UIC/DODAAC) of the consignee. It is transparent to the user how the freight actually moves through the system. For example, a high priority (TP1) shipment tendered to QUICKTRANS could move exclusively by CONTRUCK to destination. On the other hand, a low priority shipment tendered to CONTRUCK could move partially by QUICKTRANS if space is available on the aircraft. In either case, the shipper is charged for the type of service originally requested. Upon entering the QUICKTRANS system, shipment information is entered into a database. The database is used for a number of functions including manifesting, dispatching, tracing, costing,

billing, and reporting. The database can be accessed by locations possessing the proper hardware and software.

Charges for services performed by QUICKTRANS are billed to each user monthly. They are based on the total cost to operate the system prorated across the number of users by pound-miles during any 1-month period. Criteria used to develop monthly costs are computed based on the type of shipment (air or surface), distance traveled, weight, whether normal, outsized, or special handling, and whether the shipment is minimum charge. Elements of system costs include contract aircraft costs, DoD and contract fuel, commercial truck costs, terminal, computer and miscellaneous costs. Administrative costs at Naval Material Transportation Office (NAVMTO) are not included. The cost of moving cargo from origin to the nearest QUICKTRANS terminal is not included except when the shipper is colocated at a QUICKTRANS service point.

Guaranteed Traffic is used for almost all air and surface shipments made from DLA managed supply depots. Guaranteed Traffic agreements come in many forms including air small parcel, air freight, truckload (TL), LTL, dedicated truck, and specialized equipment. These agreements are usually regionalized by traffic lanes and take into consideration the various cost differentials experienced in different parts of the country. Guaranteed Traffic is unique because it guarantees the commercial carrier winning the competitive award of all the traffic to a given area at the rate submitted by the carrier. Because of the competition involved in the Guaranteed Traffic award process, DLA has experienced significant decreases in its transportation expenditures over the past 10 years. Of the various Guaranteed Traffic options, second day air will be utilized in this study as the most close equivalent to QUICKTRANS in terms of speed of delivery.

In March 1992, DLA was mandated to take over management of all defense depots in order to provide more cost effective service. In May 1992 representatives from DLA, Naval Supply Systems Command (NAVSUP) and NAVMTO met in Norfolk, VA to discuss the most cost effective method of transportation for cargo from the newly acquired service depots.

This study is intended to determine which system, QUICKTRANS or Guaranteed Traffic, provides the least overall transportation cost to the Department of Defense (DoD) while maintaining a comparable level of customer service.

1.2 PROBLEM STATEMENT

To determine whether the QUICKTRANS (QT) system is more cost effective than Guaranteed Traffic (GT) for transporting DLA high priority air shipments from the West Coast.

1.3

OBJECTIVES

The objectives of the study are as follows:

- o Calculate the transportation cost of air shipments from consignor to consignee through the QT system.
- o Calculate the transportation cost of those same shipments moving under the GT program.
- o Compare and analyze the results.

1.4

SCOPE

The scope of the study is as follows:

- o The study uses 3 months of data (May, June and July 1992) as recorded on billing tapes provided by NAVMTO. The tapes are derived from the QT relational database.
- o Data are limited to all QT shipments, i.e. high priority air shipments, that moved through Travis AFB.
- o The data include: normal cargo, hazardous cargo and outsized cargo.
- o Consignees are limited to customers located CONUS.
- o The study also uses data from DLA's Materiel Release Order (MRO) file for the most recent period available. Only high priority cargo originating from Tracy/Sharpe Defense Depot and going to QT customers will be selected from the MRO data.

1.5

ASSUMPTIONS AND LIMITATIONS

The assumptions and limitations of the study are as follows:

- o The 3 months of QUICKTRANS shipment data are taken to be representative of the volume, freight mix, and cost of the QUICKTRANS system.
- o Perfect freight consolidation.
- o Outsized shipments are defined to be any Transportation Control Number (TCN) having a length or width in excess of 72 inches.
- o The prime GT carriers move outsized shipments.

SECTION 2 METHODOLOGY

The methodology for comparing the cost of QT to GT is to take QT data and build and rate shipments as if they moved under the GT program. The cost of the QT program from origin service point onward will not be calculated as the cost is included in the historical data provided.

2.1 CREATION OF THE QT DATABASE

After receiving the billing tapes provided by NAVMTO, the Destination Cross Reference Code (DCR) and 3-digit DoDAAC for the consignees were attached to each record. In addition, the 3-digit zipcodes of the consignor and the QT origin service point were attached. Using these 3-digit zipcode pairs, road mileage was attached to each record from consignor to the QT service point.

Outsized shipments were identified by the following codes assigned by NAVMTO :

- blank: length and width less than or equal to 72 inches
- 'A': length or width exceeding 72 inches
- 'B': length or width exceeding 108 inches
- 'C': length or width exceeding 176 inches
- 'D': length or width exceeding 264 inches

Hazardous shipments were not treated separately since under the GT agreements carriers are required to transport such shipments provided the shipments have been properly packaged for movement by air in accordance with International Civil Aviation Organization Technical Instructions.

A cargo type for each TCN was assigned depending on whether a TCN was normal small parcel, normal freight or outsized.

2.2 BUILDING AND RATING GT SHIPMENTS USING QT DATA

GT shipments were constructed by aggregating TCNs by consignor, customer (as defined by DCR), QT receipt date (used as a surrogate for the consignor's shipdate) and cargo type. DCR is a freight delivery address; DCRs are used by DLA depots to consolidate shipments going to the same installation.

GT rates on file for Defense Depot Tracy/Sharpe were used to rate the shipments. Second day air transportation was chosen to most closely duplicate the level of customer service provided by QUICKTRANS. Shipments weighing less than or equal to 99 lbs were rated in accordance with the rates on file for the prime GT air small parcel carrier. For shipments exceeding 99 lbs the rates on file for the prime GT air freight carrier were applied. 2.3

2.3

CALCULATION OF GOVERNMENT BILL OF LADING COSTS

The savings/cost of preparing Government Bills of Lading (GBLs) to the DoD was calculated using \$15.02/GBL. This figure is based on the cost of preparing a GBL as reported in a study performed by the Defense Audit Service.¹ The reported value was adjusted for inflation.

2.4

CALCULATION OF TRANSPORTATION COST TO OT ORIGIN SERVICE POINT

As stated in the QUICKTRANS USER'S GUIDE and CUSTOMER SERVICE DIRECTORY the shipper is responsible for delivering the cargo to the appropriate QUICKTRANS air or truck terminal/service point for onward movement.² For this analysis all cargo originating at DLA-managed service depots was assessed a transportation charge to the origin service point.

Inbound shipments were built by aggregating the TCNs by origin depot and QT receipt date (used as a surrogate for the depot's shipdate). Shipments less than or equal to 70 lbs were rated using United Parcel Service rates; all other shipments were rated using the GT point-to-point rates on file for Defense Depot Tracy/Sharpe and Naval Supply Center Oakland.

¹ "Review of Costs Associated With the Use of Government Bills of Lading and Commercial Bills of Lading (Project 8ST-178)," Defense Audit Service, Report No. 79-108, 29 June 1979.

² "QUICKTRANS USERS GUIDE and CUSTOMER SERVICE DIRECTORY," Navy Material Transportation Office, Norfolk, VA., Department of the Navy, P. 3, 4 June 1992.

SECTION 3 ANALYSIS

3.1 RESULTS

The results of the cost analysis are displayed in Table 3-1. The total cost of the QT program is calculated to be \$958,000. This cost is composed of the transportation cost inbound from the DLA-managed depots estimated to be \$40,000 and the QT system cost of \$918,000 as recorded in the NAVMTO billing tapes. The total Guaranteed Traffic (GT) cost is \$671,000. The GT cost is composed of \$586,000 in air small parcel and air freight transportation costs; the GBL preparation cost is calculated to be \$85,000, based on the 5,667 GBLs built from the QT data. Therefore, if all assumptions hold, GT would cost \$287,000 less than QT for the 3-month period studied. This result is shown in Figure 3-1. The vertical axis shows dollars in thousands. The horizontal axis identifies the transportation program. In the sensitivity analysis the \$671,000 cost of the GT program will be identified on bar charts as "All Assumptions Hold."

3.2 SENSITIVITY ANALYSIS

The results of the analysis are founded on two key assumptions: perfect freight consolidation at the depots and the prime GT carriers move outsized shipments. Sensitivity analysis was performed on each of these assumptions separately and combined.

3.2.1 SENSITIVITY ANALYSIS FOR ASSUMPTION OF PERFECT FREIGHT CONSOLIDATION

In August of 1990, DLA-OT performed a study to estimate the percentage of missed consolidation of shipments occurring at the six primary DLA depots. The study was based on the F-189 report, Freight Consolidation Potential, which is concerned with freight consolidation. The analysis showed that the missed consolidation percentage (MCP), defined as a statistic reflecting the number of occurrences when a depot issued two or more GBLs to the same freight destination by the same mode of transport on the same day, ranged from a low of 0.6 percent to a high of 23.2 percent. All depots, save one, had a MCP of 14.9 percent or less (DLA-OT Interoffice Memorandum, 9 Aug 90. Subject: Depot Freight Consolidation). Based on the results of this work the sensitivity analysis used MCPs of 15 percent, believed to be representative of consolidation effectiveness at most depots, and 30 percent, believed to be representative of a worst case.

Table 3-1. Cost Analysis Based On Assumptions

<u>PROGRAM</u>	<u>COST</u>
QUICKTRANS	
INBOUND TO SERV PT	\$40,000
SERV PT TO CONSGNEE	\$918,000
TOTAL	\$958,000
GUARANTEED TRAFFIC	
TRANSPORTATION	\$586,000
GBL PREPARATION	\$ 85,000
TOTAL	\$671,000

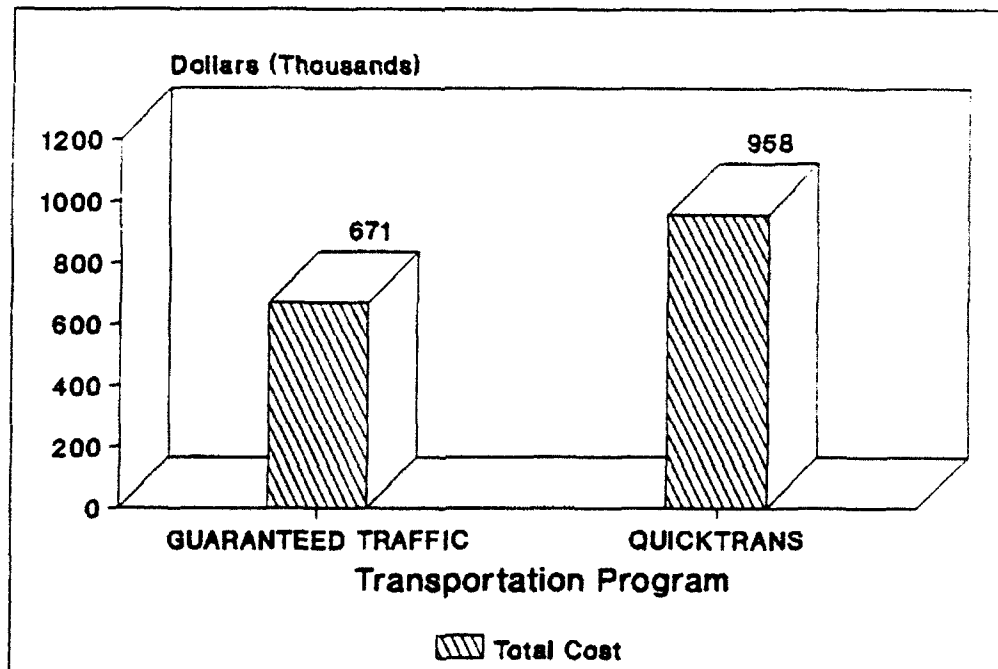


Figure 3-1. Initial Estimate of Cost Savings: \$287,000

Figure 3-2 displays the results of performing sensitivity analysis on the perfect freight consolidation assumption. The format is similar to that of the previous bar chart except that the horizontal axis now indicates the scenario. The bar chart shows that as the number of shipments increases due to missed consolidation the transportation cost increases as well. The cost increases from \$671,000 to \$695,000 for 15 percent MCP and to \$717,000 for 30 percent MCP. The cost increase occurs because there are more shipments of lesser weight being moved. Transportation rates are higher for lower weight shipments due to the regressive nature of the rate schedule, i.e. lower rates for higher weight categories.

3.2.2

SENSITIVITY ANALYSIS FOR ASSUMPTION THAT PRIME GT CARRIERS MOVE OUTSIZED SHIPMENTS

Under the GT agreement for air shipments, the small parcel carrier is required to move all shipments < 99 lbs and less than 120 inches in length and girth. Shipments exceeding 120 inches in length and girth are tendered to the air freight carrier for delivery. By agreement he is required to deliver this freight. However, if the prime carrier is a freight forwarder this may not be possible to accomplish within the timeframe in the GT agreement. Therefore, the prime carrier doesn't always pickup outsized shipments since he may not have the equipment readily available to make timely delivery. To address the issue of the prime GT carrier not picking up outsized shipments sensitivity analysis was performed assuming the worst case, i.e. the prime GT carrier does not pickup any outsized shipments.

Two scenarios were developed to address the problem of moving outsized freight. The first scenario is that the shipper moves the outsized freight using expedited truck service or an air freight carrier, whichever is cheaper. Expedited truck service charges are based on the rate for moving a 40,000 pound minimum plus an additional 20 percent of the charge for expedited service. The time frame for coast-to-coast service is reported to be 4 days. The second scenario is that all outsized freight is tendered to the air freight carrier.

Figure 3-3 displays the results of this scenario. The format of the bar chart is similar to that for the previous bar charts. "Prime Carrier" is the label indicating the primary GT carrier moves all outsized cargo, "Air Frt/Exp Trk" is the label for the scenario in which outsized shipments move by air freight carrier or expedited truck service, whichever is cheaper. The label "Air Frt" identifies the case in which the air freight carrier moves all outsized cargo. The bar chart shows the total cost of the GT increases by \$29,000 when outsized shipments are moved either by air freight carrier or by expedited truck service. The increase is \$107,000 when the air freight carrier moves all outsized shipments. Transportation costs increase when cargo is moved by air freight carriers since their rates are higher than those of

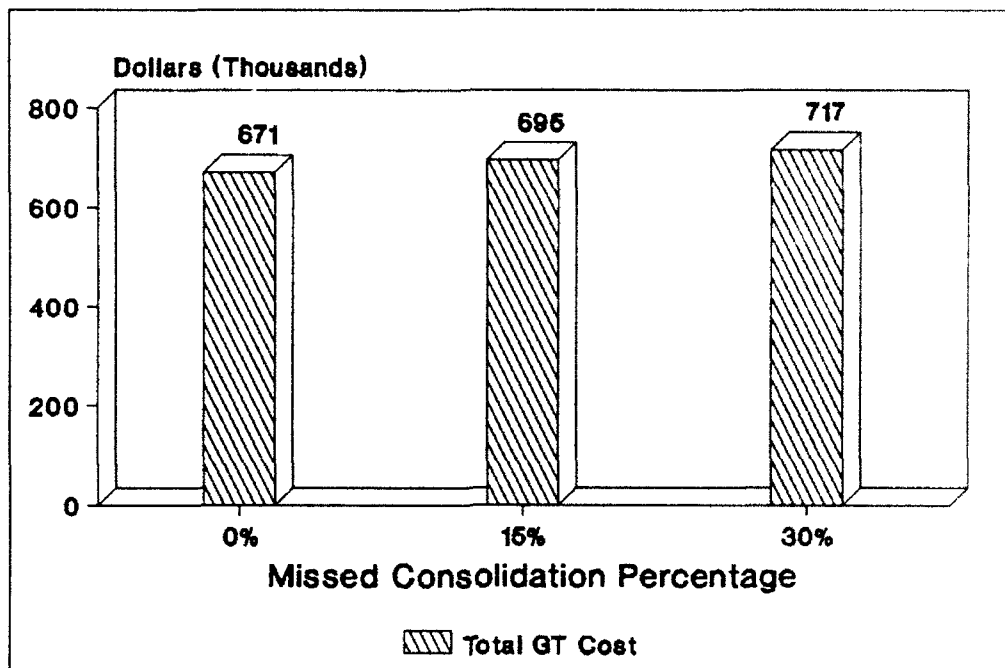


Figure 3-2. Perfect Consolidation Assumption

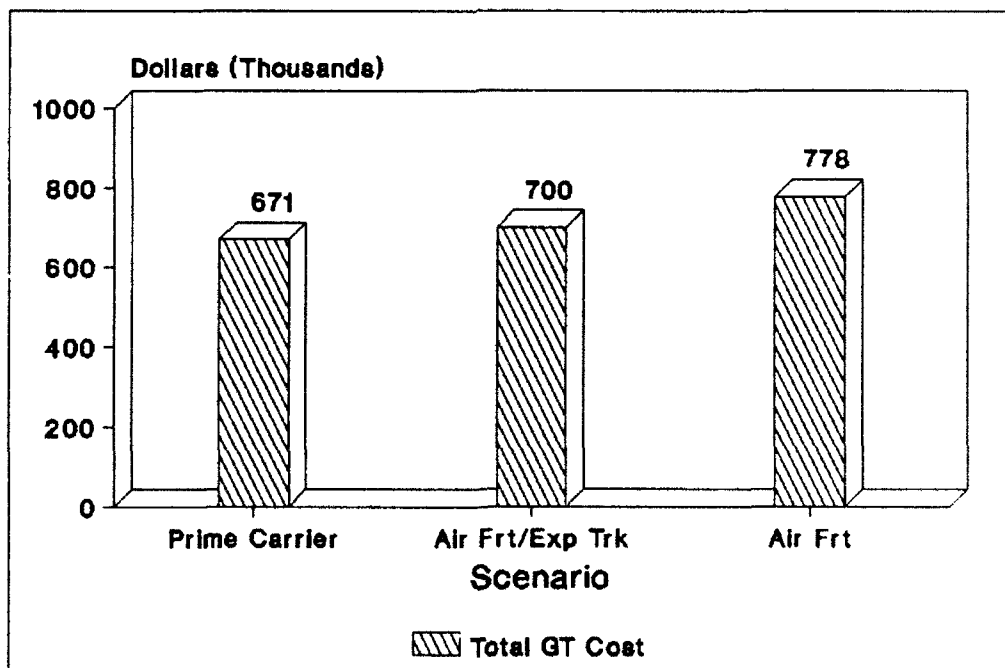


Figure 3-3. Outsized Freight Assumption

air freight forwarders. Although air freight carriers' rates are greater, these carriers can provide a higher level of service than air freight forwarders when transporting outsized cargo.

3.2.3 SENSITIVITY ANALYSIS ON COMBINED EFFECT OF ASSUMPTIONS

The combined effect of the assumptions on the cost of GT was examined for both MCPs. Figures 3-4 and 3-5 are bar charts showing the effect on total cost. Again, the format for these charts parallels the format of the previous bar graphs. The results displayed in Figure 3-4 are based on an MCP of 15 percent; the results in Figure 3-5 are based on an MCP of 30 percent. The results of all scenarios are summarized in Table 3-2. Table 3-2 is a cost difference matrix. Column one identifies the level of missed consolidation. Columns two through four identify the scenario for movement of outsized shipments. Each entry is the difference in total cost between QUICKTRANS and Guaranteed Traffic. Positive values indicate Guaranteed Traffic is cheaper. As the table shows the difference in cost ranges from \$135,000 for the worst case scenario (30 percent MCP and the air freight carrier moves all outsized shipments) to \$287,000 for the best case (all assumptions hold).

3.2.4 SENSITIVITY ANALYSIS FOR INCREASED UTILIZATION OF QT FLIGHTS

Sensitivity analysis was conducted to determine the affect on results if there is increased utilization of QT flights using DLA cargo. This analysis is based on the assumption that there is sufficient capacity on QT flights to accommodate DLA air shipments.

Requisitions were selected from DLA's Materiel Release Order (MRO) database that were high priority air shipments originating at DLA-managed depots and going to QT customers, as defined in the QT customer directory. During the 3-month period 1000 MROS were found that met this criteria to fly QT.

The additional cargo was assumed to ride "free" on the QT flights so there was no increase in transportation cost for QT except for the cost of moving the cargo from the DLA-managed depots to the QT origin service point. This inbound transportation cost for MROS going QT was calculated using the methodology of section 2-4. The cost of transporting the high priority MROS was calculated for GT along with the associated cost of GBL preparation. Both costs were added to the baseline cost of GT (all assumptions hold). Table 3-3 displays the results of this sensitivity analysis. Results show the cost for QT increased only \$3,000 whereas the cost of GT increased \$20,000. However, the GT program remained more cost effective.

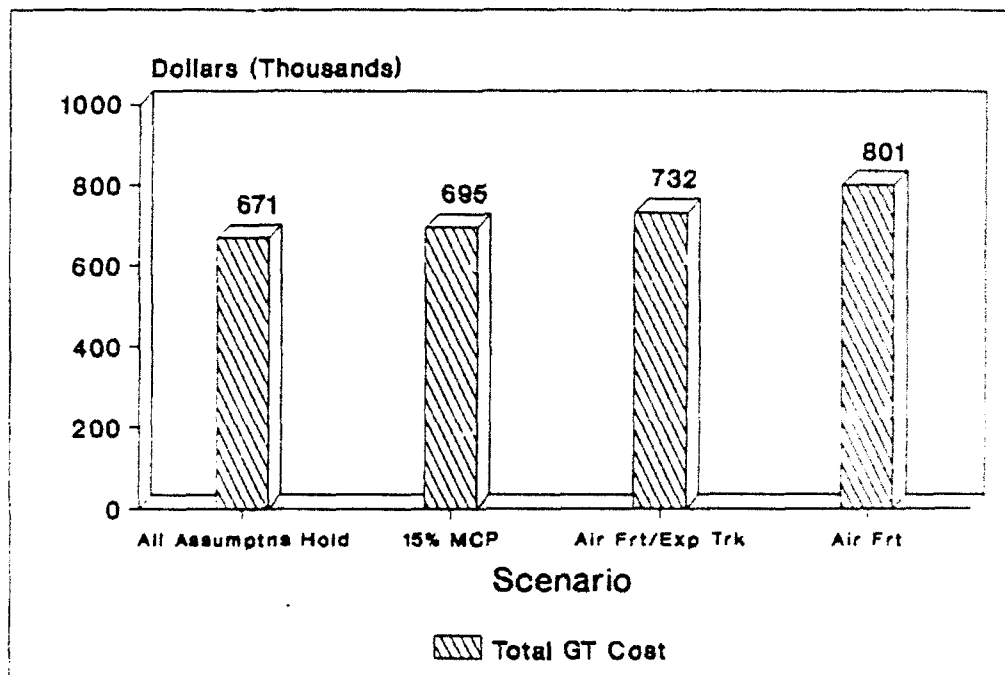


Figure 3-4. Combined Effect of Assumptions I

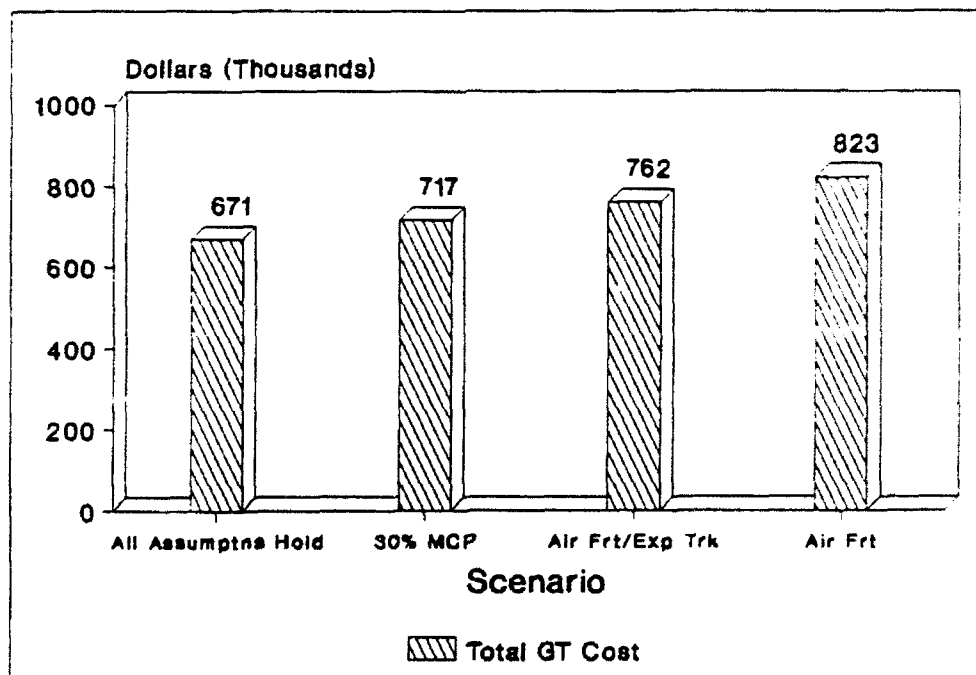


Figure 3-5. Combined Effect of Assumptions II

**Table 3-2. Summary of Program Cost Differences
(QT - GT)**

Scenario For Moving Outsized Shipments			
MCP	Prime Carrier	Air Frt/ Exp Truck	Air Frt
0%	\$287,000	\$258,000	\$180,000
15%	\$263,000	\$226,000	\$157,000
30%	\$241,000	\$196,000	\$135,000

Table 3-3. Increased Utilization of QT Flights

<u>PROGRAM</u>	<u>COST</u>
QUICKTRANS	
BASELINE COST	\$958,000
INBOUND TO SERV PT	\$ 3,000
TOTAL	\$961,000
GUARANTEED TRAFFIC	
BASELINE COST	\$671,000
TRANSPORTATION	\$9,000
GBL PREPARATION	\$11,000
TOTAL	\$691,000

SECTION 4 CONCLUSIONS

Based on the results of the study these conclusions follow:

- o Results show GT produces a savings over QT for high priority air shipments originating at the QT origin service point Travis AFB.
- o The estimated savings range is from \$135,000 to \$287,000 depending on level of consolidation and the mode of transporting outsized shipments.

SECTION 5
RECOMMENDATIONS

Based on the conclusions of the study, the following recommendation is made:

Recommend that GT should be used instead of QT for high priority air shipments originating at Travis AFB.

APPENDIX
LIST OF ACRONYMS

LIST OF ACRONYMS

<u>Acronym</u>	<u>Definition</u>
AFB	Air Force Base
BPO	Blanket Purchase Order
CONTRUCK	Consolidated Truck
CONUS	Continental United States
DCR	Destination Cross Reference
DLA	Defense Logistics Agency
DLA-OT	Defense Logistics Agency, Supply Operations, Transportation Division
DoD	Department of Defense
DODAAC	Department of Defense Address Activity Code
GBL	Government Bill of Lading
GT	Guaranteed Traffic
LTL	Less-than-Truckload
MAC	Military Airlift Command
MCP	Missed Consolidation Percentage
MRO	Materiel Release Order
NAVMTO	Naval Material Transportation Office
NAVSUP	Naval Supply Systems Command
NDTS	Northeast Dedicated Truck System
NECP	Navy Expediting and Consolidation Program
QT	QUICKTRANS

LIST OF ACRONYMS (CONTINUED)

TL	Truckload
TCN	Transportation Control Number
UIC	Unit Identification Code

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13. ABSTRACT (Maximum 200 words) In March 1992, the Defense Logistics Agency (DLA) was directed to assume management of the Service depots. In May 1992, representatives from DLA, Naval Supply Systems Command, and the Naval Material Management Transportation Office (NAVMTO) met in Norfolk, VA to discuss the most cost effective means of moving cargo from the service depots. One of the principal issues became the cost effectiveness of the QUICKTRANS (QT) program in comparison to the cost effectiveness of the Guaranteed Traffic (GT) program. The purpose of this study was to determine which system, QT or GT, provides the least overall transportation cost to the Department of Defense (DoD). The scope of the study includes all high priority air shipments originating at the QT service point of Travis AFB during a 3-month period.				
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